

Meteoroids are dangerous to spacecraft

Meteoroid damages Space Shuttle window

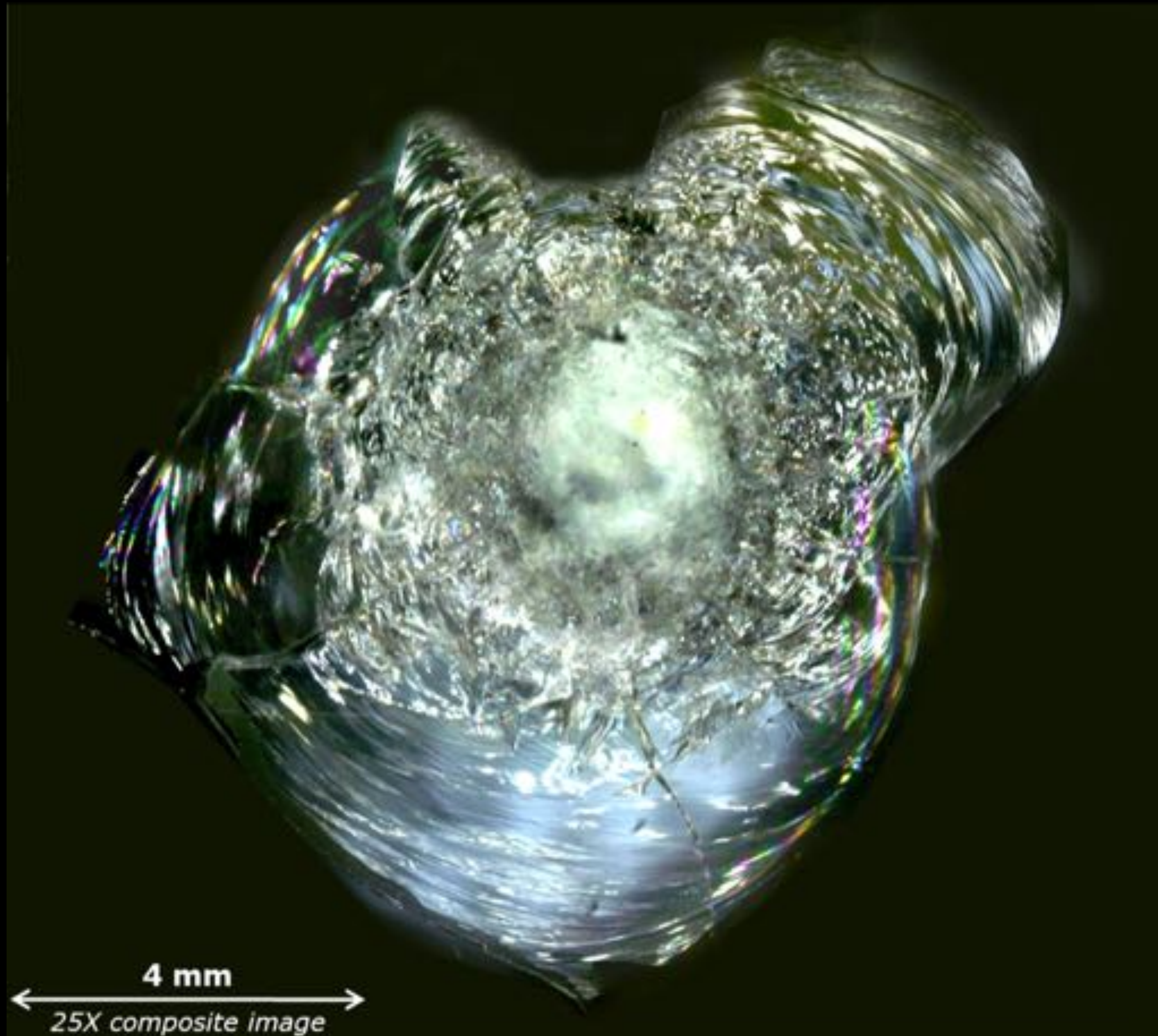


Image credit: NASA/JSC HVIT Team

Meteoroids put dents in Shuttle windows much like bouncing gravel puts dents in your car's windshield. However, meteoroids move at such high speeds that they can partly vaporize the surfaces they strike!

Meteoroid bumps a camera

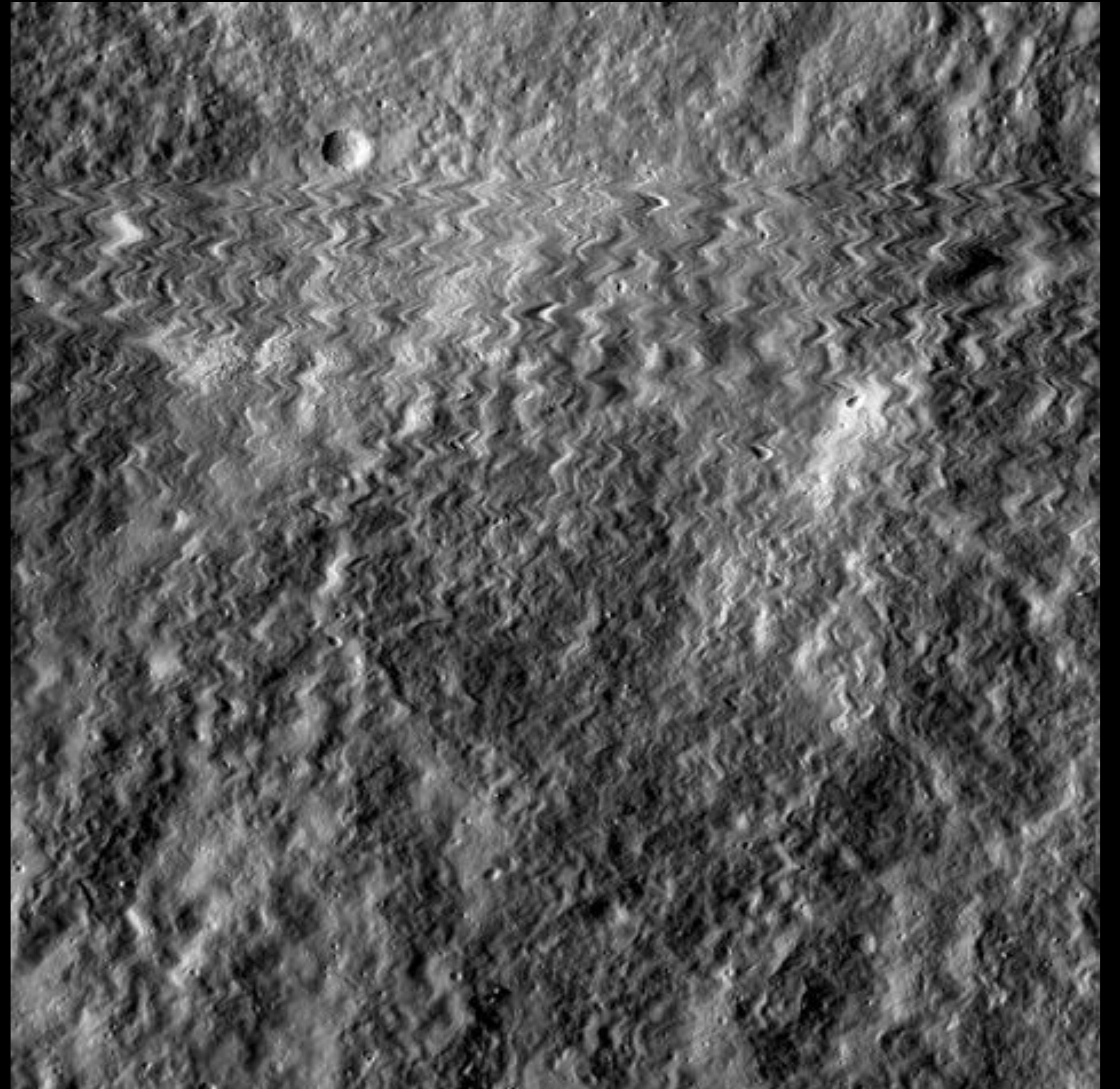


Image credit: NASA GSFC/Arizona State University

Even when meteoroids *don't* damage a spacecraft, they can cause problems. Here, a small meteoroid bumped a camera on the Lunar Reconnaissance Orbiter (LRO), causing wiggles in this scan of the lunar surface. *Can you spot where the meteoroid hit the camera?*

Meteoroid breaks into a spray of tiny particles

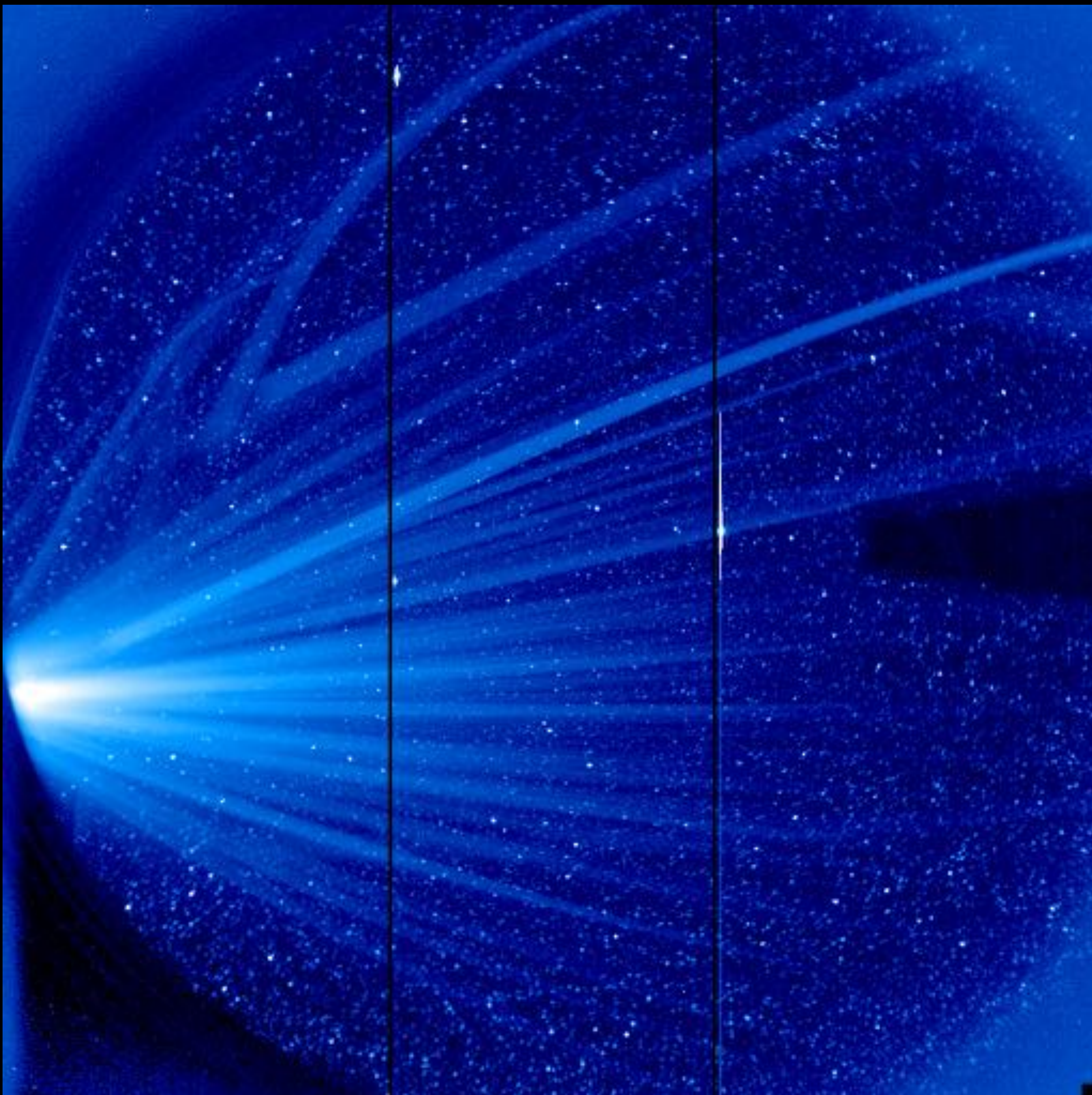


Image credit: stereo.gsfc.nasa.gov

A dust particle (smaller than a meteoroid) hit the STEREO spacecraft and produced this fountain of smaller particles. When a meteoroid breaks up, its “shrapnel” can also be dangerous.

Dents from meteoroids can rip space suits



Image credit: NASA/JSC Image & Science Analysis Group

Meteoroids and pieces of space junk create rough edges on the outside of the Space Station that can damage space suits. The astronauts' gloves had to be thickened to help prevent them from ripping.

For more information, visit
<https://www.nasa.gov/offices/meo>

